Appl. No. 10/087,161
Amendment dated October 1, 2003
Reply to Office Action of July 1, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

Claim 1 (currently amended): A method of controlling parasitic mites of honey bees, which comprises exposing parasitic mites to a miticidally effective amount of a compound, comprising:

(a) a ketone of the structure:

CH<sub>3</sub> - (CH<sub>2</sub>)<sub>x</sub> -CO-(CH<sub>2</sub>)<sub>y</sub> - CH<sub>3</sub>

wherein y is 0 and x is 0 to 5 or wherein y is 1 or 2 and x is 3 or 2, respectively; or

(b) a compound selected from the group consisting of 1-heptanol, ethyl butyrate, benzaldehyde, and heptaldehyde, and d-limonene,

wherein said miticidal amount is effective to kill mites, to incapacitate mites such as by disrupting neural or other physiological functions to prevent essential mite functions or reproduction, or to render mites impaired sufficiently to be trapped, drowned, isolated, or otherwise removed from an area.

Claim 2 (original): The method of claim 1 wherein said parasitic mites are Varroa mites.

Claim 3 (original): The method of claim 1 wherein said controlling is carried out by placing said effective amount of said miticidal compound inside a honey bee hive so that vapors of said compound are distributed in the hive.

Claim 4 (original): The method of claim 1 wherein said effective amount of said miticidal compound is dispensed by a dispensing means comprising a device or formulation which provides controlled release, slow release or sustained release of said compound.

Reply to Office Action of July 1, 2003

Claim 5 (original): The method of claim 4 wherein said parasitic mites are exposed to an effective amount of said miticidal compound for one or more brood cycles.

Claim 6 (original): The method of claim 5 wherein said parasitic mites are exposed to an effective amount of said miticidal compound for two or more brood cycles.

Claim 7 (currently amended): A The method of claim 1 wherein said miticidal compound is controlling parasitic mites of honey bees, which comprises exposing parasitic mites to a miticidally effective amount of 2-heptanone.

wherein said miticidal amount is effective to kill mites, to incapacitate mites such as by disrupting neural or other physiological functions to prevent essential mite functions or reproduction, or to render mites impaired sufficiently to be trapped, drowned, isolated, or otherwise removed from an area.

Claim 8 (original): A method of controlling parasitic mites of honey bees, which comprises placing in an area where mites are to be attracted a dispenser means which provides an amount of 2-heptanone effective to attract parasitic mites.

Claim 9 (original): The method of claim 8 wherein said parasitic mites are Varroa mites.

Claim 10 (original): The method of claim 8 wherein said dispensing means comprises a device or formulation which provides controlled release, slow release or sustained release of 2-heptanone.

Claim 11 (original): A method of controlling hive invading pests of honey bees, which comprises placing in an area where pests are to be controlled a dispenser means which provides an effective hive invader-controlling amount of 2-heptanone.

Appl. No. 10/087,161

Amendment dated October 1, 2003

Reply to Office Action of July 1, 2003

Claim 12 (original): The method of claim 11 wherein said dispensing means comprises a device or formulation which provides controlled release, slow release or sustained release of 2-heptanone.

Claim 13 (original): The method of claim 11 wherein said hive invading pest is selected from the group consisting of greater wax moth, lesser wax moth, small hive beetle, ants, and Tropilaelaps.

Claim 14 (original): The method of claim 11 wherein said hive invading pest is the greater wax moth, Galleria mellonella.

Claims 15-26 (canceled)

Claim 27 (new): The method of claim 7 wherein said parasitic mites are Varroa mites.

Claim 28 (new): The method of claim 7 wherein said controlling is carried out by placing said effective amount of 2-heptanone inside a honey bee hive so that vapors of said compound are distributed in the hive.

Claim 29 (new): The method of claim 7 wherein said effective amount of 2-heptanone is dispensed by a dispensing means comprising a device or formulation which provides controlled release, slow release or sustained release of said compound.

Claim 30 (new): The method of claim 7 wherein said parasitic mites are exposed to an effective amount of 2-heptanone for one or more brood cycles.

Appl. No. 10/087,161 Amendment dated October 1, 2003 Reply to Office Action of July 1, 2003

Claim 31 (new): The method of claim 7 wherein said parasitic mites are exposed to an effective amount of 2-heptanone for two or more brood cycles.